

Attorney Docket No. 24785.00

IN THE APPLICATION  
OF  
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AND  
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FOR AN  
OFFICE GYM EXERCISE KIT

OFFICE GYM EXERCISE KIT

## BACKGROUND OF THE INVENTION

## 1. FIELD OF THE INVENTION

5 The present invention relates to exercise equipment, and particularly to an exercise kit adapted to be used with an office chair.

## 2. DESCRIPTION OF THE RELATED ART

10 Although there are a number of exercise devices on the market, there are few which are portable and fewer still that provide a range of exercise options for an individual exerciser. Many exercise devices are cumbersome and much larger than is convenient to relocate. Additionally, many individuals have the desire to exercise in easily accessible locations without the difficulty involved in obtaining various types of equipment.

15 Thus it is advantageous to have an exercise device that is portable, lightweight and capable of being used in a number of surroundings, such as homes, offices and the like.

20 One way to provide for various exercises in convenient locations is to use a portable exercise device in combination with home or office furniture or room components such as doors. The related art endeavors to supply a portable exercise device that provides a range of exercise movements. However, there is a need for a portable exercise device that is easily attached to an

office or home chair and that allows a user to engage in a great variety of exercise movements. Additionally, there is a need for a portable exercise device that is simply constructed using inexpensive materials.

5 U.S. Pat. No. 5,690,594, issued November 25, 1997 to R. Mankovitz, describes an exercise apparatus for attachment to a post of a chair. The exercise apparatus has a foot support bar that allows a user's foot to extend along the bar. Wheels are mounted to the foot support and resilient members serve to attach  
10 the foot support bar to the post of the chair. The user then sits in the chair and pushes the foot support bar away from the chair, thereby exercising the user.

U.S. Pat. No. 5,599,260, issued February 4, 1997 to Rovinsky et al., shows an exercise device with a roller attached to the  
15 post of a chair by an elastic stretchable element. The roller can be employed by the user to exercise either the user's foot or arm. The roller has a piece connected to it to allow for foot placement. Additionally, the user can unfold the roller such that it can be taken into the user's arm for arm exercises.

20 U.S. Pat. No. 6,099,445, issued August 8, 2000 to Rovinsky et al., describes an exercise device having a rigid frame and a number of exercise elements connected to the rigid frame. The frame is capable of being mounted on the central post of a chair. The exercise elements connected to the frame allow the user to  
25 exercise the user's legs, arms, and neck.

U.S. Pat. No. 5,743,838, issued April 28, 1998 to Willis, shows a method of making an exercising device and the device

itself. The exercise device has a flexible body that is wrapped about the back of a chair and an elastic member attached to the flexible body. The elastic member can accommodate a limb and the user may extend the elastic member away from the chair in order to exercise the limb.

U.S. Pat. No. 5,141,482, issued August 25, 1992 to Hern, describes an exercise device that is strapped about the back of a chair. The exercise device includes a seat-engaging strap, a chest strap and shoulder straps. The chest and shoulder straps are wrapped about the chest of a user and tension members connect the chest and shoulder straps to the seat-engaging strap that is secured about the chair. When the user leans forward, the resistance from the device tightens his stomach muscles.

U.S. Pat. No. 5,624,360, issued April 29, 1997 to Wilkins, describes a portable exercise device having handgrips, elastic bands and anchor brackets. The anchor brackets are clamped onto a door and joined to the handgrips by the elastic bands. The user then grasps the handgrips and stretches the elastic bands, thereby exercising the user's arms. The device may also be used to exercise other parts of the body, including feet, upper torso, etc.

Other patents showing exercise devices include U.S. Pat. No. Des. 319,273, issued August 20, 1991 to S. Fox (vehicular exerciser); U.S. Pat. Pub. No. US 2002/0142898 A1, published October 3, 2002 and invented by W. Willis et al. (office exercise furniture); U.S. Pat. Pub. No. US 2004/0053756 A1, published March 18, 2004 and invented by T. Tremayne (exercise device);

U.S. Pat. No. 650,656, issued May 29, 1900 to J. Raabe (exercising apparatus); U.S. Pat. No. 2,160,722, issued May 30, 1939 to J. Cunningham (foot exerciser); U.S. Pat. No. 5,090,694, issued February 25, 1992 to E. Pauls et al. (combination chair and exercise unit).

Additional patents showing exercise devices include U.S. Pat. No. 5,171,295, issued December 15, 1992 to F. Schwalm, Jr. (portable pulley exerciser body fitness apparatus); U.S. Pat. No. 5,178,596, issued January 12, 1993 to N. McIntire (exercise apparatus); U.S. Pat. No. 5,324,243, issued June 28, 1994 to W. Wilkinson (universal, portable exercise apparatus adaptable to fit a chair); U.S. Pat. No. 5,362,296, issued November 8, 1994 to L. Wang et al. (chair mounting exercising unit); U.S. Pat. No. 6,048,292, issued April 11, 2000 to M. Gasquez (combination arm exercise apparatus and propulsion aid for a wheelchair); U.S. Pat. No. 6,117,056, issued September 12, 2000 to T. Cataldi, Jr. et al. (isotonic exercise device attachable to chair); U.S. Pat. No. 6,159,133, issued December 12, 2000 to R. Shugg (seat mounted workout station system); U.S. Pat. No. US 6,500,104 B1, issued December 31, 2002 to R. Rich (seat exercise device); International Pub. No. WO 02/056971 A1, published July 25, 2002 (exercise device); Can. Pat. App. No. 2 436 231, published July 25, 2002 (exercise device).

Although the related art addresses portable exercise devices that may be attached to chairs, what is needed is an easily constructed exercise device that may be attached to a wide

variety of chairs. In addition, the exercise kit should allow for an extensive range of exercises the user may do.

None of the above inventions and patents, taken either singly or in combination, is seen to describe the instant invention as claimed. Thus an office gym solving the  
5      aforementioned problems is desired.

#### SUMMARY OF THE INVENTION

The office gym exercise kit is a portable exercise kit that is capable of attaching about a chair post and provides for a  
10      number of exercises to be performed by a user. The exercise kit contains a flexible body that is wrapped around the post and under the base of the chair then secured such that the flexible body remains in place about the chair post. Several elastic straps are included in the kit. The flexible body has retainers  
15      affixed thereon for retaining the elastic straps. Additionally, the exercise kit includes a back attachment that encircles a chair back support and contains a retainer for retaining the elastic straps. Latching devices connect the elastic straps to the retainers. The various retainers allow for different  
20      placement of the elastic straps so that multiple exercises may be performed based on which retainer and which elastic strap is used. The user extends the straps to exercise the user's arms, legs, etc.

Advantageously, the exercise kit can be adapted to a multitude of chairs, providing the chair has a base, a post and a back support. Additionally, the kit permits the user to engage

in a variety of exercises involving the arms, the legs and the back. Further, the resistance of the elastic straps of the exercise kit may be varied based on the preferences of the user.

One aspect of the invention is that the flexible body and the flexible band are removably affixed to the chair about the chair post and the chair back support respectively. The flexible body and flexible band may be affixed about the post and the back support in a variety of ways. The flexible body and flexible band may be affixed using laces and apertures in the flexible body and flexible band. The flexible body and flexible band may be affixed using hook and loop fasteners. A further aspect of the invention is that the exercise kit allows the user to engage in multiple exercises. An additional aspect of the invention is that the components of the exercise kit are lightweight and simply assembled.

It is an object of the invention to provide improved elements and arrangements thereof for the purposes described which is inexpensive, dependable and fully effective in accomplishing its intended purposes.

These and other objects of the present invention will become readily apparent upon further review of the following specification and drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1A is an environmental, perspective view of an exercise device according to the present invention demonstrating a first exemplary exercise.

Fig. 1B is an environmental, perspective view of the exercise device according to the present invention demonstrating a second exemplary exercise.

Fig. 1C is an environmental, perspective view of the exercise device according to the present invention demonstrating a third exemplary exercise.

Fig. 2 is a planar view of an exercise kit according to the present invention.

Fig. 3 is an elevational rear view of a flexible body and a flexible band of the exercise kit according to the present invention.

Fig. 4 is an elevational side view of the flexible body and the flexible band of the exercise kit according to the present invention.

Similar reference characters denote corresponding features consistently throughout the attached drawings.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is an exercise kit, designated generally as 10 in the drawings. The exercise kit 10 is made up of a flexible body 12, a first elastic strap 14 used primarily for arm exercises, a second elastic strap 16 used primarily for leg exercises, and a first plurality of retainers 40 for restraining the elastic straps 14 and 16 to the flexible body 12. Additionally, the exercise kit 10 may include a flexible band 18



and a flexible band retainer 44 for restraining the elastic straps 14 and 16 to the flexible band 18.

Referring first to Fig. 2, the flexible body 12 of the exercise kit 10 is constructed with a flexible fabric and has a generally rectangular portion 20 with an elongated strap 22 extended therefrom. The rectangular portion 20 includes a first plurality of apertures 30 situated on two sides of the rectangular portion 20. The rectangular portion 20 additionally contains a first plurality of retainers 40 used to restrain the first elastic strap 14 or the second elastic strap 16. The elongated strap 22 includes a second plurality of apertures 32 located on the end of the elongated strap 22. The elongated strap 22 additionally has at least one retainer 42. The flexible body 12 is affixed to a chair post 90 by passing a first lace 26 through the first plurality of apertures 30 and the second plurality of apertures 32, thereby uniting the flexible body 12 about the chair post 90.

The flexible band 18 of the exercise kit 10 is constructed with a flexible fabric. The flexible band 18 has a third plurality of apertures 34 located on either end of the band 18 and at least one retainer 44. A second lace 46 may be passed

through the third plurality of apertures 34 to unite the flexible band 18 about a chair back support 94.

The first elastic strap 14 is constructed with a first elastic band 50, a pair of elastic handles 52 at either end of the first elastic band 50, a first plurality of resistance adjusting pieces 54. A first latching mechanism 56 is clipped onto the first elastic band 50. The first latching mechanism 56 allows for attachment between the first elastic strap 14 and either of the flexible body 12 or the flexible band 18.

The second elastic strap 16 is constructed with a second elastic band 60 and a second plurality of resistance adjusting pieces 62. A second latching mechanism 64 is clipped onto the second elastic band 60. The second latching mechanism 56 allows for attachment between the second elastic strap 16 and either of the flexible body 12 or the flexible band 18.

The first and second plurality of resistance adjusting pieces 54 and 62 may be adjusted to tighten or loosen the first and second elastic straps 14 and 16 respectively. The resistance adjusting pieces 54 and 62 may be substituted by a plurality of spring-loaded adjusting pieces 82.

The exercise kit 10 may additionally include an ankle attachment 70 and a pair of attachable handles 80. The ankle attachment 70 may be fastened onto the second elastic strap 16 by

a third latching mechanism 66. The ankle attachment 70 is secured about an ankle by a hook and loop fastener 72. The pair of attachable handles 80 may be fastened onto the second elastic strap 16 by the third latching mechanism 66.

5        Fig. 1A shows a first exemplary exercise that a user may engage in while using the exercise kit 10. The flexible body 12 of the exercise kit 10 is attached to a chair post 90 and the base 92 of a chair. The first latching mechanism 56 fastens the first elastic strap 14 onto one of the first plurality of  
10        retainers 40 on the flexible body 12.

      Fig. 1B shows a second exemplary exercise that a user may engage in while using the exercise kit 10. The elongated strap retainer 42 is situated between the laced portion of the flexible body 12. The elastic band 18 is shown attached about the chair  
15        back support 94. The elastic band 18 is tied to the chair back support 94 by threading the second lace 46 through the third plurality of apertures 34. The second elastic strap 16 is attached to the flexible band 18 using the second latching mechanism 64 that latches the second elastic strap 16 to the  
20        flexible band retainer 44. The pair of attachable handles 80 is connected to the second elastic strap 16 by the third latching mechanism 66. A user may change the second plurality of

resistance adjusting pieces 62 to provide varying levels of resistance.

Fig. 1C illustrates a third exemplary exercise a user may engage in when using the exercise kit 10. The second elastic strap 16 is attached to the flexible body 12 using the second latching mechanism 64. The ankle attachment 70 is joined to the second elastic strap 16 by the third latching mechanism 66.

As shown in Fig. 3, the flexible body 12, composed of a rectangular portion 20 and an elongated strap 22, is wrapped about the post 90 and base 92 of a chair. The first lace 26 is threaded through the first and second plurality of apertures 30 and 32 and tied so that the flexible body is stabilized about the post 90 and is unable to move while the user exercises. The elongated strap retainer 42 is situated at the back of the chair post 90. The flexible band 18 is secured about the chair back support 94 by tying the second lace 46 through the third plurality of apertures 34.

As shown in Fig. 4, a first plurality of retainers 40 is located on the front portion of the flexible body 12. A flexible band retainer 44 is located on the flexible band 18.

Additionally, a hook and loop attachment may be used in place of the lace and aperture combination fastener.

An exercise device combines the components of the exercise kit 10 such that the components may be used in concert.

5 It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.